# 620 Environmental Procedures During Construction

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#### 620.01 Introduction

Chapter 620 summarizes any specific environmental requirements applying to different elements of the environment during construction (i.e. Earth, Air Quality, Water Quality, etc). It is organized to parallel the presentation of requirements for each element of the environment during the design and environmental review phase in Chapter 420 through Chapter 480, and includes requirements included in permit conditions during PS&E as discussed in Chapter 520 through Chapter 550.

These requirements are spelled out in more detail in WSDOT's Standard Specifications for Road, Bridge and Municipal Construction and Construction Manual (M 41-01) as cited throughout this chapter.

#### 620.02 Earth

#### (1) Clearing and Grubbing

Prior to beginning work the site boundaries and all sensitive areas must be mark with fencing as described in Project Delivery Memo #04-04, "High Visibility Fencing" (see Exhibit 690-1).

From the standpoint of roadside appearance and control of erosion on the right of way, it is advantageous to preserve natural growth where possible. If it is not clearly shown in the contract plans, the Project Engineer should discuss with the landscape architect the preservation of natural growth that will not interfere with roadway and drainage construction before staring clearing operations. Areas to be omitted from clearing or extra areas to be cleared should be determined before

<sup>\*</sup> Web sites and navigation referenced in this chapter are subject to change. For the most current links, please refer to the online version of the EPM, available through the ESO home page: http://www.wsdot.wa.gov/environment/

starting work and an accurate record made during staking operations. For details, see the *Construction Manual*, Section 2-1. See also Section 540.23 for land clearing burns and Section 550.05 for local clearing and grading ordinances.

#### (2) Excavation

#### (a) Mining Notification

The U.S. Department of Labor, Mine Safety and Health Administration must be notified at the beginning and end of all mining operations. This includes surface mining, such as normal pit site operations; all crusher operations; and all pits and quarries, including borrow pits. The Project Engineer is responsible for this notification for WSDOT furnished pits; the contractor is responsible for all pits and quarries not furnished by WSDOT.

The Bureau of Mines reports are in addition to reports required by the Washington State Department of Natural Resources. See the *Construction Manual*, Section 1-2.2D.

See Section 540.19 for information on WDNR's Surface Mining Reclamation permit.

#### (b) Roadway Excavation

Roadway excavation is specified in accordance with Section 2-03.1 of the Standard Specifications and includes all materials within the roadway prism, side borrow area, and side ditches. Borrow, unsuitable excavation, ditches and channels outside the roadway section, and structure excavation are separately designated. See the *Construction Manual* Section 2-3 for detailed procedures including reestablishment of slopes in the event of landslide or erosion.

#### (c) Structure Excavation

There are two classes of structure excavation. Class A is excavation necessary for construction of bridge footings, pile caps, seals, wing walls, and retaining walls. All other structure excavation is Class B. See Standard Specifications 2-09.3(2), 2-09.3(3), and 2-09.3(4).

All excavation four feet or more in depth shall be shored, or protected by cofferdams, or shall meet the open-pit requirements of Section 2-09.3(3)B of the Standard Specifications. Open pit excavation or "glory holes" are not allowed adjacent to running streams.

See the *Construction Manual*, Section 2-9 for details on coffer dams, pile driving, backfilling, and other excavation operations.

#### (d) Ditch and Channel Excavation

Areas where open ditches are to be constructed shall be cleared and grubbed the same as areas for roadway construction. See *Construction Manual*, Section 2-10.

#### (3) Borrow Pits

Sections 2-03.3(14K), 9-03.20, and 9-03.21 of the Standard Specifications provide for the use of select and common borrow for use in construction of

embankments. The requirements of Section 2-03.3(13) of the Standard Specifications must be observed in the operation and cleanup of borrow pits. With the requirement for reclamation of all pits, a plan must be developed to meet the requirement of the specifications and special provisions and approved before the start of pit operations. See the *Construction Manual*, Section 3.3 for guidelines on site reclamation.

See Section 540.19 for WDNR Surface Mining Reclamation permit; Section 520.13, Authorization for Use of Public Lands (borrow pits on federal land); and Section 540.17, Easement for Use of Public Land (special use permit for state-owned land).

#### 620.03 Air Quality

Construction activities may result in temporary impacts on air quality from land clearing burns, asbestos demolition, and operation of portable asphalt batching plants, rock crushers, and Portland concrete cement plants. See Chapter 425 for background on air quality requirements that may apply to the project, and Section 540.23 for air quality permit information.

#### 620.04 Water Quality

During construction, erosion control and prevention of erosion and spills of hazardous materials are most important to avoid impacts on water quality. Cooperation with other agencies is important to ensure compliance with environmental commitments made during project development. See **Chapter 431** for background on water quality requirements that may apply to the project.

#### (1) Applicable Statutes and Regulations

Please see **Section 431.02** for details.

#### (2) Policy Guidance

WSDOT policy is to "minimize the impact that construction, operation, and maintenance of transportation facilities have on the state's surface and ground water" (Washington Transportation Commission Policy Catalog).

#### (3) Interagency Agreements

See Section 610.03 for information on interagency agreements applicable to water quality protection during construction: the Compliance Implementing Agreement (2004) and Implementing Agreement on Water Quality Standards (1998).

#### (4) Technical Guidance

Please see Section 431.05 for background information.

#### (a) Stormwater and Erosion Control

The primary concern with stormwater runoff during construction is erosion prevention and sediment control. Deposition of sediment in water bodies degrades water quality and severely impacts aquatic habitat.

WSDOT's *Highway Runoff Manual* (M 31-16) provides guidance to fulfill the requirements for temporary erosion and sediment control, as well as

permanent control measures to manage stormwater after construction is complete. Consult the *Highway Runoff Manual* for detailed information on Stormwater Planning and Temporary Erosion and Sediment Control Plan requirements. For technical assistance with the development of these plans, contact regional environmental staff, Hydraulics, or Water Quality Units.

General contract requirements for applying and enforcing the standards in the *Highway Runoff Manual* on construction contracts are in *Standard Specifications*, Section 1-07.15, and 8-01 and in Section 2-3.4 of WSDOT's *Construction Manual*.

Seasonal restrictions for erosion and sediment control practices apply to construction projects. The restrictions are identified in *the Highway Runoff Manual*. Contact the Regional Environmental Manager, Regional Water quality unit, Hydraulics, or the ESO Water Quality Program for further information on erosion and sedimentation control guidance.

Information for designing and maintaining roadside vegetation to minimize long term erosion after construction is included in the Erosion Control chapter of WSDOT's *Roadside Manual* (M 25-30).

#### (b) Herbicides

For information on application of aquatic herbicides for noxious or non-noxious weeds, see Section 431.05 of the EPM. When any herbicide application is made in or on the waters of the state, it is considered an aquatic herbicide application and falls under jurisdiction of the Department of Ecology. Prior to the application WSDOT or its contractor must meet conditions established in NPDES Programmatic Permit for aquatic noxious plant control and nuisance aquatic plant and algae control. (See Section 540.08.)

#### (5) Permits and Approvals

Below is summary information on several permits related to water quality. See **Appendix F** for a complete list of permits that may apply to the project.

#### (a) Stormwater Management and Erosion Control

The NPDES General Permit to Discharge Stormwater Associated with Construction Activity is administered by the Department of Ecology to regulate stormwater discharge on construction sites for each project that disturbs one acre or more. Low risk projects between one and five acres can apply for an Erosivity Waiver through Ecology. During project development, an NPDES Construction Stormwater Permit covering activity in the WSDOT right-of-way will have been obtained. The permit should be kept in close proximity to the project site, along with the permit coverage letter, the Stormwater Pollution Prevention Plan (SWPPP), and the Site Log Book. For any stormwater discharge resulting from construction activity outside the WSDOT right-of-way, including off-site equipment staging areas, material storage areas, and borrow areas that have not been included in WSDOT's NPDES permit for the project, the contractor will be responsible for obtaining the necessary permits.

See WSDOT's *Highway Runoff Manual* (M 31-16), described in **Section 431.05**, for guidance on stormwater planning and how to develop TESC Plans.

For information about the NPDES permit see Section 540.04.

#### (b) Section 404 Permit

Under the Clean Water Act, a Section 404 permit from the Corps of Engineers is required for discharging, dredging, or placing fill materials within waters of the United States, including wetlands. The permit is required to construct temporary sedimentation basins. If applicable, the permit will have been obtained during project development and should be included in the contract special provisions. See Section 520.02 for details.

If the contractor's method of operations, weather conditions, design changes, or other factors affect waters of the United States in ways not anticipated or represented in the permit, the Project Engineer will work with the Region environmental staff, the assigned representative of the Corps, and the contractor to modify the existing permit or obtain a new or revised one as appropriate.

#### (6) Non-Road Requirements

Please see Section 431.07 for background.

#### 620.05 Wildlife, Fisheries, and Vegetation

Transportation activities affecting fish species listed as threatened or endangered under the Endangered Species Act (ESA) include:

- Release of construction-related chemicals, products and by-products.
- Clearing, grubbing and filling.
- Runoff from impervious surfaces.
- Activities in areas having listed fish or potential for listed fish habitat.
- Stormwater discharge into a river or stream with a low-flow designation.

See **Chapter 436** for background on requirements related to wildlife, fisheries, and vegetation that may apply to the project.

#### (1) Applicable Statutes and Regulations

Please see Section 436.02 for details.

#### (2) Policy Guidance

WSDOT policy is to minimize impacts to natural habitats in design, construction, and maintenance activities (Washington Transportation Commission Policy 6.3.3). Please see Section 436.03 for details.

#### (3) Interagency Agreements

See Section 610.03 for information on the Memorandum of Agreement with WDFW on Construction Projects in State Waters, which is applicable to wildlife protection during construction. See also Section 436.04.

#### (4) Technical Guidance

Please see Section 436.05 for details. See WSDOT Instructional Letter 4020.02 (February 25, 2002) regarding stormwater effects on fish species listed under the ESA. The Instructional Letter is an addendum to the *Highway Runoff Manual*. (See Section 436.05(3)(d).)

Timing restrictions may apply to projects in the vicinity of spawning, nesting, migrating, or wintering habitat of many species, whether or not they are listed as threatened or endangered. For species not protected under the ESA, priority habitats and species recommendations by WDFW may be applied to protect their habitat. In-water work and noise generating activities such as pile driving and blasting are of the greatest concern. Procedures listed in WSDOT's *Roadside Manual* (M 25-30) include:

- Clearly flag or place construction fencing around all habitat areas and features that are to be protected.
- Erosion control should be implemented and maintained during construction to minimize impacts to aquatic species.
- Emphasize sensitive areas during pre-construction meetings. Note the kinds of activities not allowed in sensitive areas (clearing, grading, stockpiling materials, staging vehicles and equipment).

#### (5) Permits and Approvals

Construction in or near streams, rivers, or other water bodies, may require a Hydraulic Project Approval (HPA) from the Washington State Department of Fish and Wildlife (WDFW), which would have been obtained during project development. Please see Section 540.15 for details.

For projects requiring a Hydraulic Project Approval (HPA), written approval must be obtained from WDFW before commencement of construction or other work.

As agreed between WSDOT and WDFW, for each project requiring an HPA, WDFW will issue the permit to WSDOT and not to its contractor. The HPA may cover other impacts from the project, including operations in contractor staging areas, material source sites, and waste disposal sites.

When an HPA has been obtained for the project, and the permit has not been incorporated into the contract documents, the Project Engineer shall provide copies of the permit to the contractor and ensure it is properly posted at the work site at all times work is in progress. The Project Engineer should ensure that both the intent and the specific provisions of the permit are rigidly enforced.

If the contractor's method of operations, weather conditions, design changes, or other factors affect waters of the State in ways not anticipated or represented in the HPA, the Project Engineer will work with the assigned representative of WDFW and the contractor to modify the existing permit or obtain a new or revised one as appropriate.

See also WSDOT's Construction Manual, Section 1-2.2.

#### (6) Non-Road Requirements

Please see **Section 436.07** for details.

#### 620.06 Wetlands

See **Chapter 437** for background on wetland mitigation requirements that may apply to the project.

#### (1) Applicable Statutes and Regulations

Please refer to **Section 437.02** for background.

#### (2) Policy Guidance

WSDOT policy is to avoid, where practical, any activities that would adversely affect wetlands in designing, constructing, and maintaining the state transportation system (State Transportation Commission Policy 6.3.4). Appendix 1 of WSDOT's *Protection of Wetlands Plan*, Directive D-31-12, specifies that Construction Action Plans should include mitigation implementation, disposal sites, drainage facility construction, and pile driving. See Section 437.02(3).

#### (3) Interagency Agreements

See Section 610.03 for information on the Mitigating Agreement on Wetlands Protection and Management, which is applicable to wetlands protection during construction. See also Section 437.04.

#### (4) Technical Guidance

Coordination between WSDOT and Ecology is strongly encouraged to ensure compliance with wetland commitments. A pre-construction conference should be scheduled with Ecology for projects impacting wetlands (see Section 690.02 (3).)

#### (a) Wetland Mitigation

The final wetland mitigation plan prepared during project design will include a general grading plan and revegetation plan, planting plan, construction sequence and schedule, steps to minimize damage to buffers and wetlands and buffers, and methods for controlling invasive species. Contractor responsibilities should be included in contract plans and special provisions.

Within a month of completing construction and planting a wetland mitigation project, as-built plans should be sent to the lead agency, including an as-built topographical survey, plant species and quantities used, photographs of the site, and notes about any changes to the original approved plan. It should also list the contractor's responsibility concerning plant replacement, fertilization and irrigation, protection from wildlife, and contingency plan requirements. See Section 437.05(5).

#### (b) Herbicides

When any herbicide application is made in or on the waters of the state, it is considered an aquatic herbicide application and falls under jurisdiction of the Department of Ecology. Prior to the application WSDOT or its contractor must meet conditions established in NPDES Programmatic Permit for aquatic noxious plant control and nuisance aquatic plant and algae control (see Section 540.08).

#### (5) Permits and Approvals

Please see **Appendix F** and **Chapter 520** through **Chapter 550** for permits that may apply to the project.

#### (6) Non-Road Requirements

No special requirements were identified.

#### 620.07 Noise

Construction noise is temporary but may adversely affect nearby residents. During project development, the design engineer should have considered ways to reduce or mitigate the adverse impacts of construction and incorporated any requirements into contract plans and special provisions. All reasonable methods should have been incorporated in the contract special provisions. See **Chapter 446** for background on noise requirements that may apply to the project.

In most cases, daytime noise from construction activities is exempt from local laws. For some projects, permits from local jurisdictions may be needed. For each project, the local jurisdiction will need to be contacted to determine the local regulation and if a permit is required. Some acoustical analysis may be needed before the local agency will grant the permit. This is done on a case-by-case basis.

These same regulations apply to maintenance activities in all but emergency situations. In the latter case, the police department and the local permitting agency should be contacted and apprised of the situation at the earliest possible opportunity.

For guidance on obtaining a local variance, see Section 550.07.

#### 620.08 Hazardous Materials

#### (1) Introduction

This section contains policies and procedures for identifying, handling, and disposing of hazardous materials encountered during construction at WSDOT sites. It is intended as a guide for WSDOT staff and contractors that outlines step-by-step procedures for identifying, managing, and disposing of hazardous materials; notification requirements; documentation requirements; sampling and characterization requirements; as well as health and safety obligations for contractors and training requirements. This section refers to **Chapter 447**, the WSDOT Construction Manual (M 41-01), the WSDOT Standard Specifications (M 41-10), project SPCC Plans, and project SWPPPs. It also provides links to many useful agency web sites.

A key aspect of managing hazardous materials at WSDOT sites is the maintenance of clear communication between contractors and WSDOT staff. WSDOT's Environmental Services Office (ESO) is equipped to coordinate these activities and help resolve hazardous materials issues in a timely manner.

#### (2) Applicable Statutes and Regulations

Please see **Section 447.02** for details.

#### (3) Policy Guidance

WSDOT policy is to "reduce the potential adverse effects transportation, storage, application, and disposal of hazardous substances can have on surface and ground water, fish and wildlife populations and habitat, and air quality" (Washington Transportation Commission Policy 6.3.8). Please see Section 447.03 for details.

#### (4) Interagency Agreements

The Implementing Agreement between Ecology and WSDOT regarding compliance with state surface water quality standards (February 13, 1998) is intended for use by WSDOT and WSDOT contractors. The agreement covers general conditions, concrete work, erosion control, hazardous spill prevention and control, spill reporting, and specific provisions for erosion control in new roadway and bridge construction projects. Please see below for hazardous spill prevention and reporting, Section 620.04 for stormwater management and erosion control, and Section 447.05 for background information and other references. Please see Section 610.03 and Appendix E for other agreements that may be relevant to the construction phase of the project.

#### (5) Spill Prevention Plans

For all WSDOT construction contracts and developer projects on WSDOT rights-of-way, a Spill Prevention, Control, and Countermeasures (SPCC) Plan must be completed and implemented in accordance with WSDOT Standard Specification #1-07.15(1).

WSDOT's Hazardous Materials Program has developed a number of documents and guidance materials to assist contractors in developing a Spill Prevention, Control, and Countermeasures (SPCC) Plan that will meet WSDOT contract requirements. These include an example site map illustrating the level of detail and the type of information expected in a SPCC Plan submitted to WSDOT, and an example of a completed SPCC plan. Guidance is also available for WSDOT staff who review SPCC plans. These documents are at WSDOT's web site:

## http://www.wsdot.wa.gov/environment

Click on Hazardous Materials, then SPCC Plan Guidance & Training.

Or by direct link:

http://www.wsdot.wa.gov/environment/hazmat/default.htm#SPCC

Click on documents and guidance materials; then Example SPCC Plan, SPCC Plan Template, Tools and Templates, or Example Site Plan.

#### (6) Hazardous Materials Identification

The process of hazardous materials discovery, investigation, and reporting at WSDOT sites begins during the initial planning and design phases of a project. The process includes environmental documentation such as an EIS or an EA and hazardous materials investigations including an ISA, PSI, and DSI (see Section 447.01). This process allows WSDOT staff and contractors to anticipate the types of hazardous materials that are most likely to be encountered during construction. Table 447-4 in Section 447.05 includes a list many of the land uses that are likely to generate hazardous materials.

**Exhibit 620-1** indicates hazardous materials that could be encountered at WSDOT sites during construction. The identification of hazardous materials depends on observations by trained WSDOT staff and contractors and is critical in limiting WSDOT liability by preventing the offsite migration of contaminated media.

# (a) Hazardous Materials Used at WSDOT Construction Sites Procedures for using, storing, and cleaning up hazardous materials used at WSDOT sites are typically outlined in SPCC Plans that contractors are required to develop for each project. See Section 620.08(5).

# (b) Hazardous Materials Encountered at WSDOT Construction Sites During construction, a variety of hazardous materials may be encountered, including suspected or confirmed contamination identified during the initial site investigation process (e.g., during an ISA, PSI, or DSI) and unknown or unanticipated contamination. The affected media may include soil, water, air, sediment, and sludge, as well as materials associated with structures such as USTs, asbestos, transformers, and lead-based paint from facilities and bridges. WSDOT requirements for specific hazardous materials are described in Section 447.05(7).

- Terminology See Section 447.01 for definitions of various terms
  used to describe different types of wastes and problem materials that
  require special handling when encountered during construction.
  These include dangerous waste, hazardous material, hazardous
  substance, hazardous waste, problem waste, and solid waste.
- Field Screening Methods Initial identification of hazardous materials is often based on visual or olfactory observations by the contractor or WSDOT staff. However, in order to protect worker health and safety and to ensure accurate results, subsequent field screening should be performed using direct-reading equipment such as a photoionization detector or soil gas probe, as outlined in Section 447.05(5). After proper notification (as described in Section 620.08(7)), ESO staff should be contacted to conduct or oversee the field screening activities.

#### (c) Continuity of Work

Several WSDOT standard specifications are applicable to ensuring continuity of work when hazardous materials are encountered. A summary of these specifications is provided in **Exhibit 620-2**. In addition to these Standard Specifications, project-specific specifications may be written into the contract to protect WSDOT from contractor overruns. Examples of project-specific specials can be found at WSDOT's web site via the following link:

http://www.wsdot.wa.gov/environment/hazmat/default.htm

#### (7) Notification Procedures

The notification procedures outlined in **Figure 620-1** were designed to help expedite the process of identifying, managing, and disposing of hazardous materials between the Contractor, WSDOT staff, and regulatory agencies.

#### (a) Notification Trigger

Discovery of unanticipated hazardous materials at a WSDOT site is considered a notification trigger that requires WSDOT staff and contractors to implement the notification procedures outlined in Section 1-2.2K(1) of the WSDOT Construction Manual (M 41-01). A notification trigger is any action, activity, or situation that requires compliance with WSDOT's Environmental Compliance Assurance Procedure (see Section 690.02(4)). These procedures are to help WSDOT contractors and staff recognize and eliminate environmental violations during construction and ensure prompt notification of WSDOT management and agencies. Once notified, the ESO, in conjunction with the Regional Environmental Office (REO), can direct and coordinate management and disposal activities. WSDOT procedures require that any size spill to water, and any spill to soil that could impact human health, be reported to Ecology; all spills regardless of size shall be reported internally within WSDOT, as shown on Figure 620-1.

#### (b) Encountered USTs

Special consideration is necessary when USTs are encountered at WSDOT sites. The decommissioning of USTs is regulated by Ecology under WAC 173-360. The owner/operator of a site must notify Ecology within 24 hours of discovering a leak or release from a UST. If WSDOT is the site owner/operator, the Project Engineer (PE) and Regional Environmental Manager (REM) coordinate contacting Ecology. Once Ecology is notified, the ESO will coordinate subsequent site assessment activities. For more information, see Section 447.02(3) and Ecology's LUST web page:

http://www.ecy.wa.gov/programs/tcp/ust-lust/tanks.html

#### (c) Contact Numbers for Spills or Releases to Soil or Water

When a spill or release occurs at a WSDOT construction site, notifications shall be made internally within WSDOT and to appropriate local, state, or federal agencies as indicated below. Refer also to the flow chart in **Figure 620-1** for a summary of WSDOT Notification Procedures.

#### Life Threatening Spills

For life-threatening or serious hazardous materials incidents, local police, fire, and rescue services should also be contacted by calling 911.

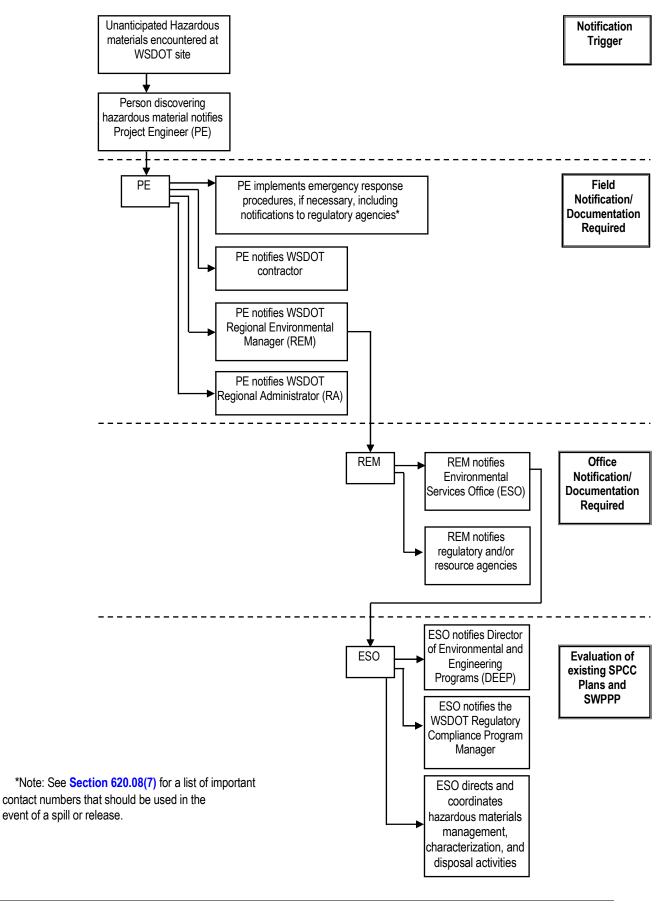
#### Spills to Water

For any quantity of spill or release to water, the following numbers shall be contacted immediately upon discovery:

National Spill Response Center: 1-800-424-8802

Washington State Emergency Management: 1-800-OILS-911

Figure 620-1: Summary Flow Chart of WSDOT Notification Procedures



#### Spills to Soil

For spills or releases to soil that are considered, based on best professional judgment and/or physical evidence (including but not limited to olfactory, visual, field instrument, and lab data), to be an immediate threat to human health and the environment, the appropriate Ecology office shall be contacted immediately upon discovery:

Ecology Northwest Regional Office: 425-649-7000
Ecology Southwest Regional Office: 360-407-6300
Ecology Central Regional Office: 509-575-2490
Ecology Eastern Regional Office: 509-329-3400

Spills or releases not considered to be an immediate threat to human health and the environment must be reported to the appropriate Ecology regional office within 90 days. Verbal and written notification may be required.

#### **WSDOT Notification for all Spills**

For any spill or release, the PE shall notify the Regional Environmental Manager and Regional Administrator (see **Appendix G**):

#### (d) Spills by Traveling Public

Neither WSDOT nor the contractor are obligated to immediately clean up spills that originate from the traveling public (accidents, leaking tanker trucks, etc.), whether or not they occur on a construction project. When such a spill is observed, notify the Washington State Patrol and Ecology to identify the responsible party. If the responsible party cannot be identified soon enough for construction purposes and/or if the spill represents an immediate threat to human health and the environment, the WSDOT Maintenance Environmental Office may be able to clean up the spill at no cost to the project. Alternatively, to the extent the construction budget can accommodate the action, the contractor may be called upon to perform cleanup activities. Cleanup costs may be recovered at a later date if and when the responsible party is identified.

#### (8) Documentation Requirements

WSDOT requires that the PE and REO document the notification process when hazardous materials are encountered. These documentation procedures are outlined in the WSDOT Construction Manual, Section 1-2.2K(1)(D).

Local and state agencies also require documentation for certain activities when hazardous materials are encountered. For example, the local clean air agency may require documentation and notification for activities such as demolition or abatement of asbestos containing materials and Ecology requires documentation for UST removal and site characterization. Also, local health authorities regulate and require documentation for disposal of solid waste to landfills (see Section 447.02(3)).

#### (9) On-Site Management of Hazardous Materials

Once notified, the ESO coordinates and directs hazardous waste management activities. Exhibit 620-1 summarizes the hazardous materials that could be

encountered at WSDOT sites and may require special consideration for on-site management.

After the notification procedures have been initiated, the PE, in coordination with ESO and WSDOT's Safety Office, should assess the health and safety situation at the site to determine whether WSDOT workers can safely continue working (see Section 620.08(11)). The PE and the ESO review the project SPCC Plans and SWPPP, evaluate the effectiveness of existing best management practices (BMPs), discuss whether other corrective actions may be necessary, and determine how to prevent an off-site release of the material.

For hazardous materials encountered on WSDOT projects, an immediate, complete cleanup is not typically required. The level of effort required for waste characterization and site cleanup is determined by WSDOT on a site-by-site basis and depends heavily on the anticipated future uses of the site, available budget, and project schedule. However, it is in WSDOT's best interest to remove as much of the contaminated material as allowed under the budget and schedule to avoid potential future cleanup actions.

#### (a) Potentially Contaminated Soil, Water, Air, Sediment, Sludge

If site conditions allow, a soil stockpile area should be established for potentially contaminated soil, incorporating BMPs such as a lining, silt fences, straw bales, and cover material.

If sufficient space is unavailable on the project site, soil can be stockpiled on other WSDOT-owned sites such as maintenance yards or borrow areas until it can be characterized. Alternatively, roll-off boxes, Baker tanks, or 55-gallon drums may be used to contain the waste. Some treatment, storage, and disposal facilities allow temporary storage of containerized waste pending the results of characterization analysis. Regardless of where the soil is stockpiled, potentially contaminated soil should be properly covered as defined in WSDOT Standard Specifications (M 41-10) Section 8.01 that specifies methods of erosion control and water pollution control.

Soil or sediment suspected of being contaminated through olfactory or visual evidence should be segregated and placed in a stockpile until it can be characterized (sampled and analyzed) by ESO or other qualified staff, or as directed by the project engineer.

According to WAC 296-24-95601, a qualified person is someone familiar with the construction and operation of equipment used at a site and the hazards involved. In general, WSDOT personnel are considered qualified to collect initial waste characterization samples if they have a minimum of 24 hours of hazardous waste operations training (HAZWOPER). However, the site-specific hazard assessment and evaluation set forth in WAC 296-843-11005 and WAC 296-843-11010 determines the level of training actually needed.

The ESO can direct dewatering activities for other contaminated media such as water or sludge. Airborne contaminants such as dust laden with heavy metals should be controlled using dust suppression methods, such as water trucks and mulch. WSDOT and its contractor should be aware that

adding clean material to existing contaminated material increases the volume of contaminated material, may be difficult to separate at a later date, and may increase overall disposal costs.

#### (b) Specific Hazardous Materials

The ESO coordinates the management of specific hazardous materials such as USTs, asbestos, arsenic-contaminated soil, and lead-based paint. Refer to Section 447.05(7) for WSDOT requirements for specific hazardous materials.

#### (10) Disposal of Hazardous Materials

Disposal options for hazardous materials are based on type and level of contamination as determined through correct sample collection and analytical testing. Coordination with the ESO will ensure proper sample planning, collection, and testing for disposal. If not already outlined in the project specifications, the ESO will contact the appropriate disposal facility or disposal contractor, verify the analytical requirements and number of samples necessary to characterize the material, and facilitate laboratory analysis of waste characterization samples. WSDOT is mandated to use state contracts for the disposal of hazardous materials from WSDOT sites. Contractors may use other vendors of their choice.

#### (a) Disposal Services Overview

State Contract No. 07198 – Hazardous Waste Disposal-Recycling Services covers several types of hazardous waste, such as waste oil, waste paint, solvents, batteries, and PCBs. This contract can be viewed online at:



State Contract No. 00301 – Disposal of Contaminated Solid and Liquid Waste, covers contaminated soil, sediments, sludge, construction demolition debris, asbestos-containing materials, and contaminated liquids, including groundwater, surface water, stormwater, and decontamination water. This contract can be viewed online at:

## http://www.ga.wa.gov/pca/contract/00301c.doc

State Contract No. 11601 – Spent Lighting, Computer, and Electronic Equipment Collection, Reuse, Recycling, and Disposal Services can be viewed online at:

http://www.ga.wa.gov/pca/contract/11601c.doc

#### (b) Laboratory Services Overview

The ESO coordinates characterization of hazardous materials for disposal.

Contracted laboratories perform analyses required to characterize hazardous materials such as total petroleum hydrocarbons, pesticides/herbicides, PCBs, BTEX, halogenated volatile organics, total metals analysis, asbestos, TCLP, and flash point. Many laboratories are able to perform most analyses within 24 hours to 48 hours with a premium charge.

WSDOT is mandated under State Contract No. 00801 to use contract laboratories for waste characterization and other sample analysis. This contract can be viewed online at:

https://fortress.wa.gov/ga/inet/servlet/PCAContractDetailSv?contnbr=

Contractors may use a vendor of their choice provided that the laboratory is accredited by Ecology, since it is WSDOT policy to use only accredited laboratories. More than 380 laboratories accredited by Ecology in Washington State under WAC 173-240 can be queried by city or county at Ecology's web site, which can be accessed at:

http://www.ecy.wa.gov/apps/eap/acclabs/labquery.asp

#### (c) Sampling Requirements for Characterization

The ESO coordinates collection of waste characterization samples according to the requirements of the selected disposal facility or disposal contractor and according to MTCA or other regulatory requirements. The ESO also consults with the laboratory regarding sample volume, container, and shipping requirements for the specific analyses to be completed.

In the event ESO staff are not available to collect samples for waste characterization, adequately trained WSDOT regional Project Engineering Office staff may perform sample collection activities. The ESO can provide training and guidance on how to collect samples, preventing cross contamination of samples, the number of samples required, and how to store and deliver samples to a laboratory. The ESO can also provide coordination between the analytical laboratory and the disposal company to ensure that the proper sampling requirements are met.

- Waste Characterization for Off-Site Treatment or Disposal The number of samples and type of analyses required to characterize waste for off-site treatment or disposal largely depends on varying permit requirements of the selected disposal facility. For example, the disposal facility may require discrete grab samples be collected to characterize soil for disposal based on tonnage (e.g., one sample for the first 30 tons, three samples for 150 tons or less, etc.).
- Waste Characterization for On-Site Reuse The number of samples and type of analyses required for on-site reuse of hazardous materials is coordinated by the ESO. The acceptable level of contamination allowed to remain on site depends on the type of site use (residential, commercial, or industrial) and the presence of critical areas on or near the site. In some cases, contaminated water may be disposed of by means of sanitary/storm sewers, provided that certain criteria are met.
- Cleanup Levels Cleanup levels are regulated by Ecology under the Model Toxics Control Act (WAC 173-340) and Dangerous Waste Regulations (WAC 173-303) and are determined for each project by Ecology in consultation with the ESO. The level of effort necessary to remediate each site depends on the project needs and conditions,

such as future site use and whether final construction will preclude the future ability to clean up the site.

#### (d) Transport and Manifesting of Hazardous Waste

The ESO coordinates transport and manifesting of hazardous waste from WSDOT sites. When these materials are encountered, WSDOT is considered to be the generator and is responsible for obtaining hazardous waste permits (e.g., Form 2, see Section 540.24). Regulations regarding hazardous materials packaging, manifesting, transport, and other requirements are set forth by the U.S. Department of Transportation under Chapter 49 CFR. The bulk of these regulations are listed in Parts 172 and 173. A summary of information regarding transportation and manifesting requirements for hazardous materials titled "Guide for Hazardous Materials Shipping Papers" can be viewed online at the National Transportation Library web site:

## http://ntl.bts.gov/DOCS/hmtg.html

49 CFR Part 172, "Hazardous materials table, special provisions, hazardous materials communications, emergency response information, and training requirements," can be viewed online at:

http://www.access.gpo.gov/nara/cfr/waisidx\_03/49cfr172\_03.html

49 CFR Part 173, "Shippers – general requirements for shipments and packagings," can be viewed online at:

# http://www.access.gpo.gov/nara/cfr/waisidx\_03/49cfr173\_03.html

Manifests are not required for disposal of problem wastes such as low-level petroleum-contaminated soil and asbestos-containing materials. However, WSDOT must determine on a case-by-case basis how contaminated wastes that do not exceed a regulatory cleanup level are disposed of. In some cases, problem wastes can and should be reused onsite. Under project contracts, problem waste becomes the responsibility of the WSDOT contractor when such waste is encountered at a WSDOT site. The contractor is responsible for securing county permits, if required, for waste disposal or reuse, and for following all state water quality and air quality standards as stated in WSDOT standard specifications.

Two types of landfills accept the majority of wastes potentially encountered at WSDOT sites. Problem wastes can be accepted at limited purpose landfills or sent to a treatment facility to be treated or recycled. Inert wastes, defined in WAC 173-350-990, include wastes such as concrete, asphalt, masonry, and glass that can be disposed of at an inert waste landfill. Land clearing wastes containing woody debris may be reused on-site or disposed of at a wood waste landfill. Refer to Section 620.08(10)(a) for details regarding state contracts that cover hazardous materials disposal.

#### (11) Health and Safety Requirements for Contractor and WSDOT Employees

All contractors working for WSDOT must provide controls to ensure the health and safety of their employees and other persons, to prevent property damage, and to avoid interruptions in the performance of the work under the contract. Specific WSDOT contractor requirements for health and safety are in Section 1-2.2(I) of the WSDOT Construction Manual (M 41-01), and are summarized in EPM Section 447.02(3). Exhibit 620-1 summarizes various types of hazardous materials that could be encountered at WSDOT sites and may require special health and safety considerations for site workers and WSDOT personnel.

WSDOT inspectors performing characterization or field screening of unanticipated hazardous materials are not required by law to have 40-hour HAZWOPER training. In general, WSDOT personnel are considered qualified to perform initial characterization or field screening of hazardous materials if they have a minimum of 24 hours of HAZWOPER training (often referred to as first responder training). However, it is the site-specific hazard assessment and evaluation set forth in WAC 296-843-11005 and -11010 that determine the level of training actually needed.

It is not WSDOT policy to enforce Washington Labor and Industry (L&I) requirements, but rather to communicate with contractors when hazardous materials are known or anticipated to be present at a WSDOT site. Worker health and safety is solely the responsibility of WSDOT contractors. In general, only the contractor personnel directly involved with addressing encountered hazardous materials at a WSDOT site need hazardous materials training. The mere presence of hazardous materials at a site does not necessitate all contractor personnel to have the training.

#### (12) Permits and Approvals

Please see Section 540.24 for details.

#### (13) Non-Road Requirements

Please see Section 447.07 for details.

#### 620.09 Other Elements of the Environment

Other environmental issues include consistency with local growth management and other plans, shoreline regulations, farmlands, Section 4(f) and Section 6(f) requirements, and historic/cultural resources. These issues will have been analyzed and documented during project development and any relevant requirements included in contract special provisions. This section highlights potential issues that could arise during construction and references background information in **Chapter 450** through **Chapter 470**.

#### (1) Land Use Plans, Growth Management

See Chapter 451 for background on land use or growth management requirements that may apply to the project; see Section 550 for local permits and approvals.

#### (2) Coastal/Shorelines

See Chapter 452 for background on any coastal/shoreline requirements that may be included in contract documents; see Section 540.03 and Section 550.02 for state and local permits and approvals.

#### (3) Wild and Scenic Rivers

See Chapter 453 for background on any wild and scenic rivers requirements that may be included in contract documents.

#### (4) Farmlands

See **Chapter 454** for background on any farmlands requirements that may be included in contract documents.

#### (5) Public Lands (Forests)

For work in forested areas, the Project Engineer should encourage the contractor to comply with all federal and state forest rules and regulations governing the protection of forests and carrying out work within national and state forests. The contractor shall take all reasonable precautions to prevent and suppress forest fires. The Project Engineer shall report to the nearest forest fire warden at the earliest possible moment the location and extent of any fire and shall take immediate steps to control the fire if practicable (WSDOT *Construction Manual* (M41-01) Section 1-2.2D). For a Memorandum of Understanding between WSDOT and the U.S. Forest Service regarding coordination of transportation activities on National Forest Lands, see Section 455.04.

See Chapter 455 for background on other public lands requirements that may apply to the project. See Section 520.13 for authorization to use federal lands, and Section 540.17 for easements and use permits on state owned land.

#### (6) Historic and Cultural Resources

See Chapter 456 for background on historic and cultural resource requirements that may apply to the project. See Section 520.05 for federal archaeological resources protection permit, and Section 540.22 for state permit. Also see the *Construction Manual*, Section 1-1.10.

It is both national and state policy to preserve historical and prehistorical objects and ruins. These may include sites, buildings, artifacts, fossils, or other objects of antiquity that may have some particular significance from a historical, cultural, or scientific standpoint.

Material sources, storage areas, pit sites, staging areas, and other areas used for WSDOT projects are subject to Section 106 compliance. For state-owned sites, the Project Engineer should coordinate with the Region to ensure that material sources have been surveyed and cleared for cultural resources, so that known archaeological resources may be avoided. For contractor-owned sites, the contractor is required to obtain all necessary permits to operate the site. This will have included addressing historic and cultural preservation in the SEPA environmental checklist.

If there is a known probability of encountering historical objects, the contract will most likely have included provisions for archaeological and paleontological salvage. The special provision will usually define any potential sites, and outline any recognized salvage procedures or required salvage provisions. (See Exhibit 620-3.)

If there is no special provision for archaeological and paleontological salvage in the contract, Section 1-07.16(2) Archaeological and Historical Objects, requires the contractor to notify the Project Engineer and take action to preserve the

objects or ruins. Once they have been sufficiently protected, the Project Engineer should immediately notify the Region Construction Manager, who will provide any necessary initial assistance to the Project Engineer.

Where the Region determines appropriate, the Project Engineer will contact and inform through existing Region contracts and Region affiliations, Eastern Washington University, the State Historic Preservation Officer (SHPO), and FHWA of the discovery.

The Project Engineer will also help facilitate any on-site meetings for the appropriate parties should either FHWA, SHPO, or Eastern Washington University believe it necessary.

The most current information on unanticipated or inadvertent discovery during construction is online at:

http://www.wsdot.wa.gov/environment/culres/default.htm

#### (7) Environmental Justice

See **Chapter 458** for background on environmental justice requirements that may apply to the project.

#### (8) Aesthetics and Visual Quality

See Chapter 459 for background on aesthetics and visual quality requirements that may apply to the project.

Visual quality referred to in FHWA guidance on construction impacts.

#### 620.10 Transportation/Traffic

Traffic control, pedestrian safety are environmental issues under NEPA/SEPA, and impacts will have been considered during project development. See Chapter 460 for background on transportation and traffic requirements that may apply to the project.

When the work area encroaches upon a sidewalk, crosswalk, or other areas that are near an area utilized by pedestrians or bicyclists, special consideration should be given to their accommodation and safety. Pedestrians are more susceptible to personal injury in work areas than are motorists. Visibility and recognition of hazards is an important requirement for the safety of pedestrians and bicyclists. For details, see WSDOT's *Construction Manual* (M 41-01), Section 1-2.2 I(5).

When railroads are involved within the project limits, an agreement covering the work is usually entered into between WSDOT and the railroad company. If an agreement has not been made, the Project Engineer should coordinate and monitor the development and processing of the agreement. See WSDOT *Construction Manual* (M 41-01), Section 1-2.2F.

#### 620.11 Public Services and Utilities

See Chapter 470 for background on public service and utilities requirements that may apply to the project. See also Chapter 810 for utilities accommodation issues.

In some cases, utility adjustments will be completed prior to contract work. In other cases, adjustments are to be made concurrently with the work. For details on Project

Engineer and contractor responsibilities, see the WSDOT *Construction Manual* (M 41-01), Section 1-2.2E.

### 620.12 Non-Road Requirements

No special requirements identified.

#### 620.13 Exhibits

*Exhibit 620-1* – Hazardous Materials That May Be Encountered at WSDOT Sites During Construction.

**Exhibit 620-2** – WSDOT Standard Specifications for Ensuring Continuity of Work When Hazardous Materials Are Encountered.

*Exhibit 620-3* – Construction Procedures for Discovery of Archaeological and Historical Objects.

# Hazardous Materials That May Be Encountered at WSDOT Sites During Construction

HAZARDOUS MATERIAL	INDICATORS	AFFECTED MEDIA
Petroleum- or solvent-contaminated soil	Stained soil, free product, sheen on surface water or groundwater, sweet petroleum odor	Soil, water, air, sediment, sludge
Underground storage tanks (USTs)	Remnant tank, product piping, vent pipes, fill ports, or dispenser island(s); stained soil; free product; sheen on surface water or groundwater; sweet petroleum odor	Soil, water, air, debris, sediment, sludge
Aboveground storage tanks (ASTs)	Remnant tank, product piping, or dispenser island(s); stained soil; free product; sheen on surface water or groundwater; sweet petroleum odor	Soil, water, air, debris, sediment, sludge
Polychlorinated biphenyls (PCBs)	Electrical transformers, stained soil, oily free product, sweet metallic odor	Soil, water, air, debris, sediment, sludge
Metals	Stained soil, metallic odor, dust	Soil, water, air, sediment, sludge
Asbestos-containing materials (ACM)	Construction debris, floor and ceiling tiles, pipe insulation, roofing and siding materials	Soil, air, debris, sediment, sludge
Lead-based paint (may include chromium, cadmium, copper)	Construction debris, peeling paint	Soil, water, air, debris, sediment, sludge
Mercury in fluorescent lights and ballasts	Construction debris	Air, debris
Pesticides, herbicides, fungicides	Stained soil, dead vegetation; more common in rural areas	Soil, water, air, sediment, sludge
Unlabelled drums or containers	Stained soil, unknown liquid or other material, sheen on surface water or groundwater, sweet or acrid chemical odor	Soil, water, air, debris, sediment, sludge

# WSDOT Standard Specifications for Ensuring Continuity of Work When Hazardous Materials Are Encountered

Specification	Title	Description
Section 1-04.7	Differing Site Conditions	This section requires the contractor to notify the WSDOT PE immediately of any changes in materials encountered that differ from that provided in the contract, including the detection of unanticipated contamination. The engineer then determines:
		<ul> <li>The action to be taken.</li> <li>If additional monies are due to the contractor to perform the work.</li> <li>If an extension of time will be granted to perform the work.</li> </ul>
		The contractor and all WSDOT personnel must follow the notification procedures outlined in the WSDOT Construction Manual M41-01 and summarized in EPM <b>Section 620.08(7)</b> , <b>Figure 620-1</b> .
Section 1-04.11	Final Cleanup	This section requires that the contractor shall perform final site cleanup to the PE's satisfaction. The PE will not establish the physical completion date until this is done. Site cleanup refers to cleanup of construction-related materials and debris and does not mean complete site remediation of hazardous materials. The highway right of way, material sites, and all ground the contractor occupied to do the work shall be left neat and presentable. The contractor shall remove all rubbish, surplus materials, discarded materials, falsework, camp buildings, temporary structures, equipment, and debris.
Section 1-05.1	Authority of the Engineer	This section stipulates that the contractor must follow the direction of the WSDOT PE. If the Contractor fails to respond promptly to the requirements of the contract or orders from the PE:
		<ul> <li>The PE may use Contracting Agency resources, other contractors, or other means to accomplish the work, and</li> <li>The Contracting Agency will not be obligated to pay the contractor, and will deduct from the contractor's payments any costs that result when any other means are used to carry out the contract requirements or Engineer's orders.</li> </ul>
		At the contractor's risk, the PE may suspend all or part of the work if:
		<ul> <li>The contractor fails to fulfill contract terms, to carry out the Engineer's orders, or to correct unsafe conditions of any nature.</li> </ul>
		Getting the contractor to carry out their spill plan is the most cost effective, efficient means of responding to a spill. If it becomes necessary for the agency to use one of their on-call environmental consultants, the contractor should be made aware that the agency has the ability to deduct from the contractor's payments any costs resulting from the need to carry out the contract requirements.
Section 1-05.9	Equipment	This section states that the PE will reject equipment that repeatedly breaks down or fails to produce results within the required tolerances. The contractor shall have no claim for additional payment or for extension of time due to rejection and replacement of any equipment.

Specification	Title	Description
Section 1-05.11	Final Inspection	This section states that the PE will not make the final inspection until the physical work required by the contract, including final cleanup and all extra work ordered by the Engineer, has been completed. Te physical completion date for the contract will be determined as provided in Section 1-08.5.
		Over the course of a project, small leaks and drips can cumulatively add up to create a toxic cleanup site subject to Ecology regulations. Contractors should be encouraged to address leaks and drips to soil in a timely manner so that a rain event doesn't result in contamination to surface water. In cases where the contractor has not addressed these problems as they occur, he/she should be held accountable during final cleanup. WSDOT should not be held responsible for performing environmental cleanup because the contractor performed poorly.
Section 1-05.13	Superintendents, Labor, and Equipment of Contractor	This section states that, at the PE's written request, the contractor shall immediately remove and replace any incompetent, careless, or negligent employee. Noncompliance with the request shall be grounds for terminating the contract under the terms of Section 1-08.10.
		Any WSDOT employee that observes a contractor ignoring environmental responsibilities may notify the PE regarding having the contractor removed from the project.
		The contractor shall keep all machinery and equipment in good, workable condition. It shall be adequate for its purpose and used by competent operators. The PE will rate the contractor's performance and contract compliance in these categories:
		<ol> <li>Progress of Work,</li> <li>Quality of Work,</li> <li>Equipment,</li> <li>Administration/Management/Supervision, and</li> <li>Coordination and Control of subcontractors.</li> </ol>
Section 1-07.1	Laws to be Observed	This section requires that the contractor shall always comply with all Federal, State, or local laws, ordinances, and regulations that affect work under the contract. The contractor shall indemnify, defend, and save harmless the State (including the Commission, the Secretary, and any agents, officers, and employees) against any claims that may arise because the contractor (or any employee of the contractor or subcontractor or material person) violated a legal requirement.
		If the WSDOT inspector is having difficulty gaining voluntary compliance, it is acceptable to contact the regulatory agency for assistance. In such cases, if Ecology issues a fine, it will likely be issued to the contractor rather than WSDOT.
Section 1-07.5(3)	State Department of Ecology	This section requires that the contractor shall dispose of hazardous materials in ways that will prevent their entry into State waters, all:
		<ul> <li>Toxicants (including creosote, oil, cement, concrete, and eqipment wash water); and</li> <li>Debris, overburden, and other waste materials.</li> </ul>
		Notify the Ecology Department immediately should oil, chemicals, or sewage spill into State waters. The contractor is contractually responsible for contacting Ecology should a spill occur. WSDOT is also legally responsible for ensuring that contact is made.

Specification	Title	Description
Section 1-07.13(4)	Repair of Damage	This section states that the contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2), or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay of disruption to the work. The PE may elect to accomplish repair by Contracting Agency forces or other means.
Section 1-07.14	Responsibility for Damage	This section states that the contractor, and not WSDOT, is responsible for losses or damages. The State, Commission, Secretary, and all officers and employees of the State, including but not limited to those of WSDOT, will not be responsible in any manner for any loss or damage that may happen to the work or any part, or for damage to the public for any cause which might have been prevented by the contractor, or the workers, or anyone employed by the contractor.
		The contractor shall be responsible for any liability imposed by law for injuries to, or the death of, any persons or damages to property resulting from any cause whatsoever during the performance of the work, or before final acceptance.
		The contractor shall also bear sole responsibility for any pollution of rivers, streams, groundwater, or other waters which may occur as a result of construction operations. The contractor shall exercise all necessary precautions throughout the life of the project to prevent pollution, erosion, siltation and damage to property.
Section 1-07.15(1)	Spill Prevention, Control, and Countermeasures Plan	The contractor shall prepare a project-specific spill prevention, control and countermeasures (SPCC) plan to be used for the duration of the project. The plan shall be submitted to the PE prior to the commencement of any on site construction activities. The contractor shall maintain a copy of the plan at the work site, including any necessary updates as the work progresses. If hazardous materials are encountered during construction, the contractor shall do everything possible to control and contain the material until appropriate measures can be taken.
		The SPCC plan shall address the following project-specific information:
		<ul> <li>A. Site Information</li> <li>B. Project Site Description</li> <li>C. Spill Prevention and Containment</li> <li>D. Spill Response</li> <li>E. Standby, On-Site, Material and Equipment</li> <li>F. Reporting</li> <li>G. Program Management</li> <li>H. Preexisting Contamination</li> </ul>
		If preexisting contamination in the project area is described elsewhere in the plans or specifications, the SPCC plan shall indicate measures the contractor will take to conduct work without allowing release or further spreading of the materials.
Section 1-08.8	Extensions of Time	This section describes the requirements and conditions under which the contractor may request an extension of time, and the engineer's right to determine if the extension should be granted.

Specification	Title	Description
1-08.10	Termination for Default	This section states that the Contracting Agency may terminate the contract upon the occurrence of any one or more of the following events:
		<ul> <li>If the contractor fails to supply sufficient skilled workers or suitable materials or equipment (ESC/Spill Lead);</li> <li>If the contractor disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;</li> <li>If the contractor disregards the authority of the Contracting Agency;</li> <li>If the contractor performs work which deviates from the contract and neglects or refuses to correct rejected work; or</li> <li>If the contractor otherwise violates in any material way any provisions or requirements of the contract.</li> </ul>
		The contractor shall bear any extra expenses incurred by the Contracting Agency in completing the work, including all increased costs for completing the work, and all damages sustained, or which may be sustained, by the Contracting Agency by reason of such refusal, neglect, failure, or discontinuance of work by the contractor.
Section 1-09.4	Equitable Adjustment	This section provides the guidelines for determining equitable adjustment when performing unanticipated work.

 $Source: Washington \ State \ Department \ of \ Transportation. \ 2004. \ Standard \ Specifications, \ M\ 41-10.$ 

# Construction Procedures for Discovery of Archaeological and Historical Objects

Following is a General Special Provision to be added to contract specifications as indicated. More recent updates may be available via WSDOT's web site:



http://www.wsdot.wa.gov/eesc/design/projectdev/gsppage1.htm

Select Division 1

Also refer to Standard Specifications 2004, page 1-64.



http://wwwi.wsdot.wa.gov/eesc/cons/pdfs/SS2004b.pdf

#### GENERAL SPECIAL PROVISIONS DIVISION 1

0716.GR1 – Protection and Restoration of Property

#### 071604.GR1 - Archaeological and Historical Objects (December 6, 2004)

Use in projects when reconnaissance studies indicate that there is the probability of finding cultural remains within the project limits which will require monitoring the project area during clearing, grubbing or excavation operations. Requires a pay item.

Section 1-07.16(4) is supplemented with the following:

The project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint. To protect these objects from damage or destruction, the Contracting Agency, at its discretion and expense, may monitor the Contractor's operations, conduct various site testing and perform recovery and removal of such objects when necessary.

The Contractor may be required to conduct its operations in a manner that will accommodate such activities, including the reserving of portions of the work area for site testing, exploratory operations and recovery and removal of such objects as directed by the Engineer. If such activities are performed by consultants retained by the Contracting Agency, the Contractor shall provide them adequate access to the project site.

Added work necessary to uncover, fence, dewater, or otherwise protect or assist in such testing, exploratory operations and salvaging of the objects as ordered by the Engineer shall be paid by force account as provided in Section 1-09.6. If the discovery and salvaging activities require the Engineer to suspend the Contractor's work, any adjustment in time will be determined by the Engineer pursuant to Section 1-08.8.

To provide a common basis for all bidders, the Contracting Agency has entered an amount for the item "Archaeological and Historical Salvage" in the Proposal to become a part of the total bid by the Contractor.